

Drought Information Statement for the Mid-South

Valid 12/14/2023

Issued By: NWS Memphis, TN

Contact Information: sr-meg.wx@noaa.gov

- This product will be updated December 28, 2023, or sooner if drought conditions change significantly.
- Please see all currently available products at <https://drought.gov/drought-information-statements>.
- Please visit <https://www.weather.gov/meg/DroughtInformationStatement> for previous statements.

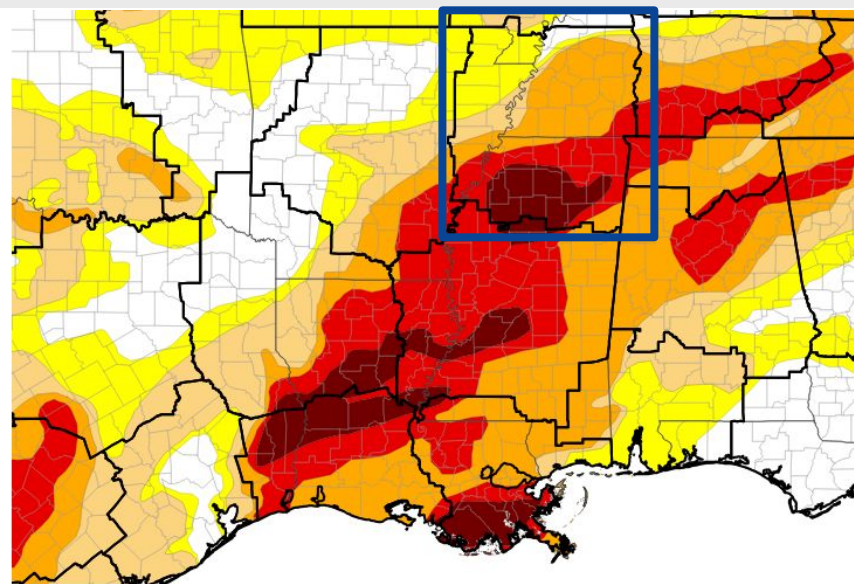




U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for the Mid-South

- DROUGHT CONDITIONS WORSEN
- Drought intensity and extent
 - D4 (Exceptional Drought): Continuing in north MS
 - D3 (Extreme Drought): Continuing in north MS and a few areas in southern TN
 - D2 (Severe Drought): Continuing in east-central AR, extreme northwest MS, and portions of West TN
 - D1 (Moderate Drought): A small swath in east-central AR and West TN, and a small section of the MO Bootheel
 - D0 (Abnormally Dry): A small swath mainly in northeast AR and the MO Bootheel
 - None: A small swath in far northwest TN



U.S. Drought Monitor



Image Caption: U.S. Drought Monitor valid 7am EST December, 14 2023





Recent Change in Drought Intensity

Link to the latest [4-week change map](#) for the Mid-South

- One-Week Drought Monitor Class Change
 - No change: Most of the Mid-South
 - Drought improved: A small portion across northeast MS
 - Drought worsened: a portion in northeast Arkansas, the MO Bootheel, and two small swaths across north Mississippi

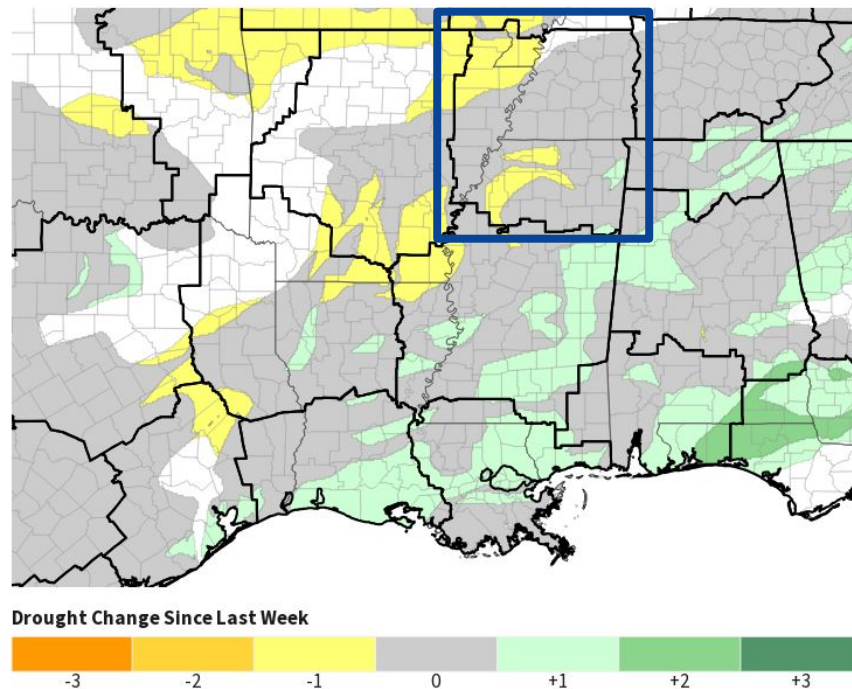


Image Caption: U.S. Drought Monitor 1-week change map valid 7 a.m. EST December 14, 2023

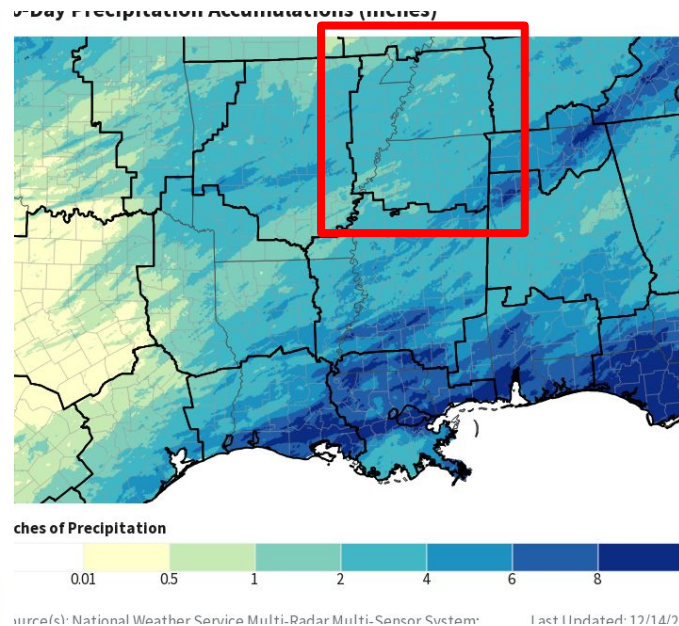
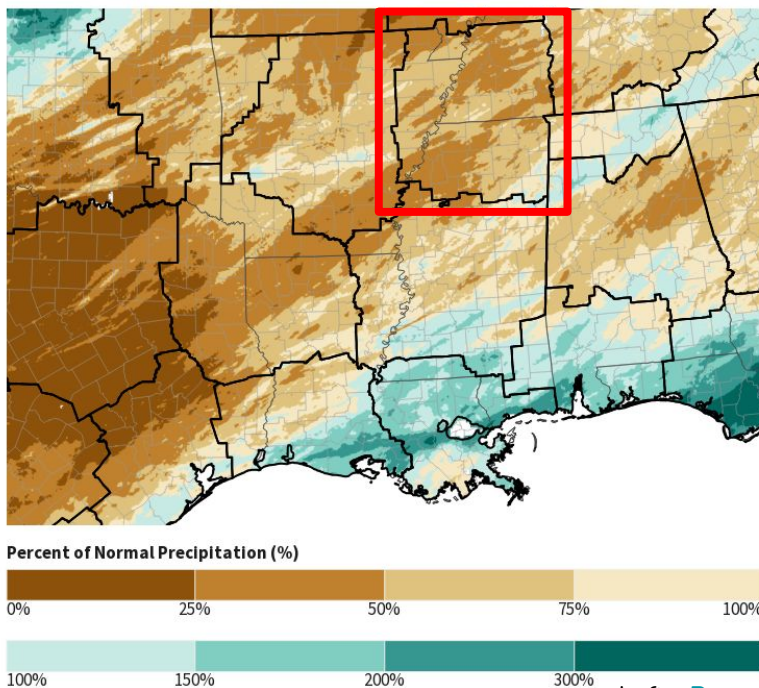




Precipitation

Over the past 30 days from the [High Plains Regional Climate Center](#)

- Precipitation totals ranged from 0.05-2" across the region. Northeast AR, the MO Bootheel, and far northwest TN experienced the lower precipitation amounts. This is reflected on the latest drought monitor where drought conditions have been reintroduced.
- The Mid-South experienced **well-below** normal precipitation over the last 30 days. A very small swath in Itawamba and Monroe Counties in MS were the only locations to record a normal precipitation amount.



Left - [Percent of Normal Precipitation for NWS-Southern Region East](#)

Right - [Precipitation for NWS- Southern Region East](#)

Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending December 14, 2023

Image Captions:



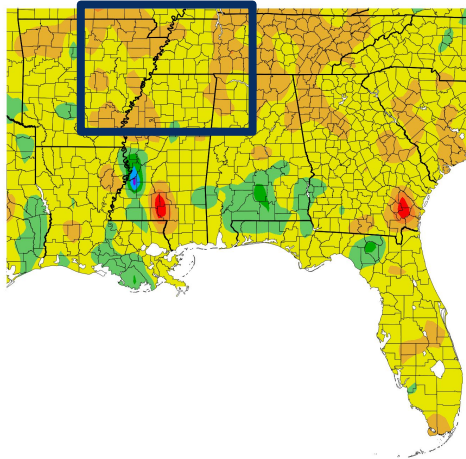


Temperature

Data over the past 30 days from the [High Plains Regional Climate Center](#)

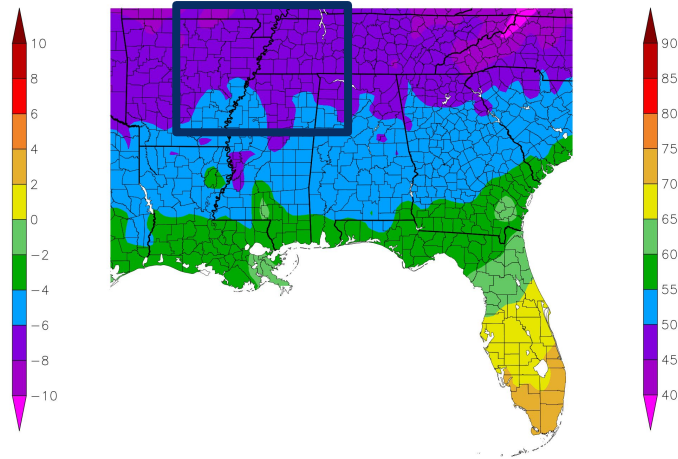
- Average temperatures have generally ranged from 45-55 degrees across the region over the last 30 days.
- Average temperatures ranged from normal to 1 to 3 degrees Fahrenheit **above** normal during this period.

Departure from Normal Temperature (F)
11/14/2023 – 12/13/2023



Generated 12/14/2023 at HPRCC using provisional data.

Temperature (F)
11/14/2023 – 12/13/2023



NOAA Regional Climate Centers 023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:

Left - [Departure from Normal Temperature](#)

Right - [Average Temperature](#)

Data Courtesy High Plains Regional Climate Center.
Data over the past 30 days ending December 13, 2023

National Weather Service
Memphis, TN



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce



Summary of Impacts

Links: See/submit [Condition Monitoring Observer Reports \(CMOR\)](#) and view the [Drought Impacts Reporter](#)

Hydrologic Impacts

- The Mississippi River at Memphis remains below low-water threshold values. The extended river forecast keeps the river very low over the next month which will continue to impact barge and river traffic.
- Hydropower production on hold at Osceola, Arkansas, due to insufficient Mississippi River water was passing through the intake pipes.

Agricultural Impacts

- Where some regions saw poor production, and in some cases, total loss, other pockets of the Mid-South reported above average yields or at least “better than expected yields” considering this season’s drought.
- Supplemental feeding and watering of livestock is required across portions of north MS and West TN.
- Some reports in West TN depict ponds are drying up. Other reports state this is the earliest supplemental feeding in 20 or more years.

Fire Hazard Impacts

- Normal wildland fire activity has been observed this month across the Mid-South. Below normal conditions exist off to the west and above normal fire conditions to the south.

Other Impacts

- There are no known additional impacts at this time.

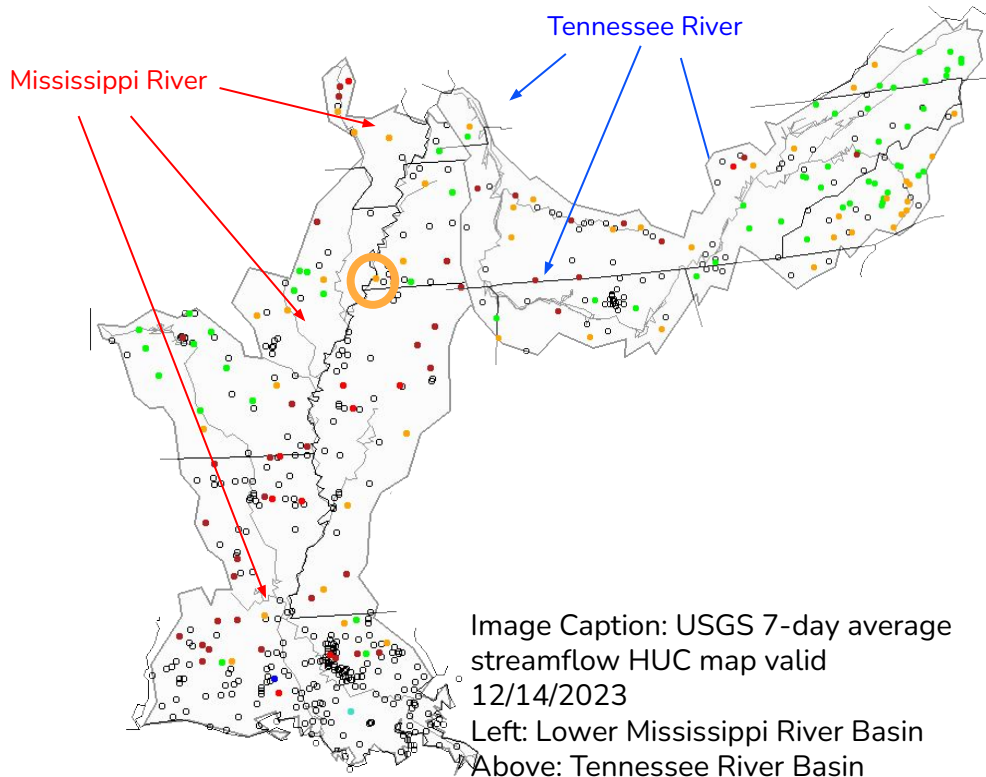
Mitigation Actions

- Please refer to your municipality and/or water provider for mitigation information.





Hydrologic Conditions and Impacts



- The **Mississippi River at Memphis** is below low water threshold values. The extended river forecast depicts the river will rise above the threshold of 5.0 ft, before falling below once again.
- The Tennessee River feeds into the Mississippi River, and is also experiencing near to below normal water levels.





Agricultural Impacts

- Soil moisture is roughly 10% of normal (or lower) across the entire Mid-South
- Crop yield has been negatively affected in a few areas in northwest MS
- Pastures in northwest MS and West TN are producing less feed for cattle than normal and require supplemental feeding

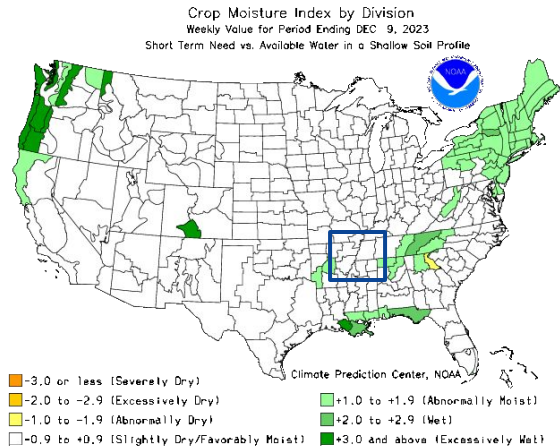
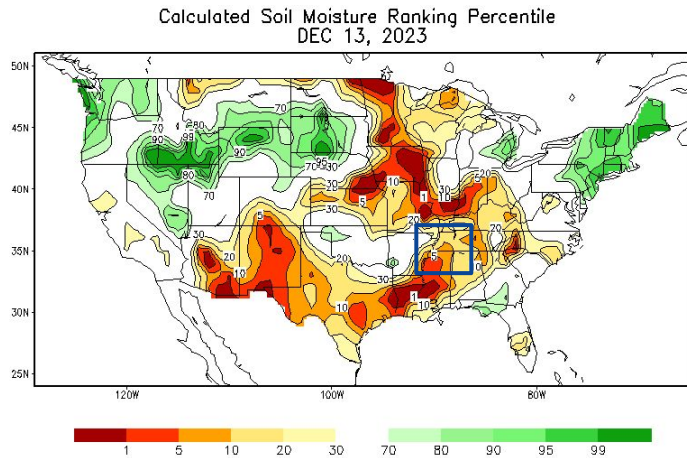


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid December 13, 2023

Right: [Crop Moisture Index by Division](#). Weekly value for period ending December 9, 2023





Fire Hazard Impacts

Link to [Wildfire Potential Outlooks from the National Interagency Coordination Center](#).

- Normal to above normal wildland fire potential is expected for the Mid-South during December. Below normal wildfire conditions are expected just to our west.
- Burn Bans currently in effect for:
 - Arkansas: None.
 - Missouri: None.
 - Mississippi: None.
 - Tennessee: None.

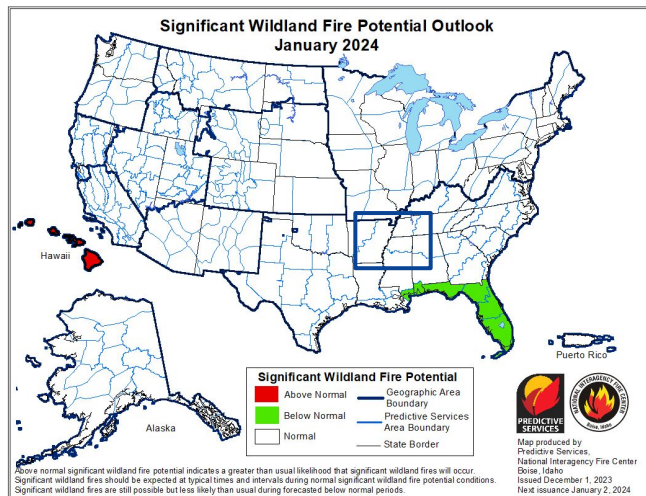
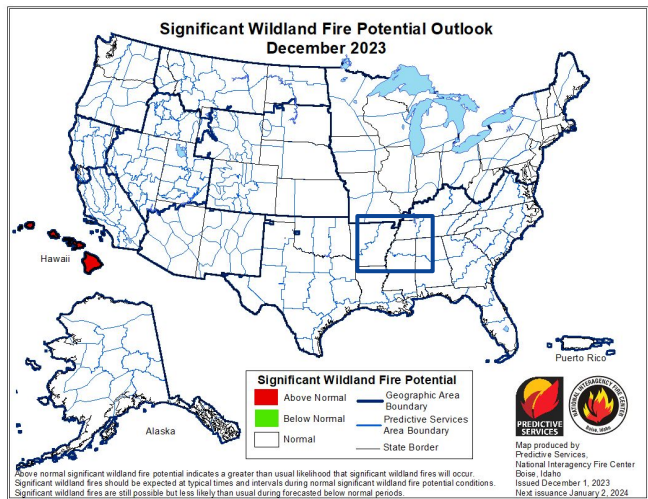


Image Caption: [Significant Wildland Fire Potential Monthly Outlook](#) for December 2023



National Oceanic and
Atmospheric Administration

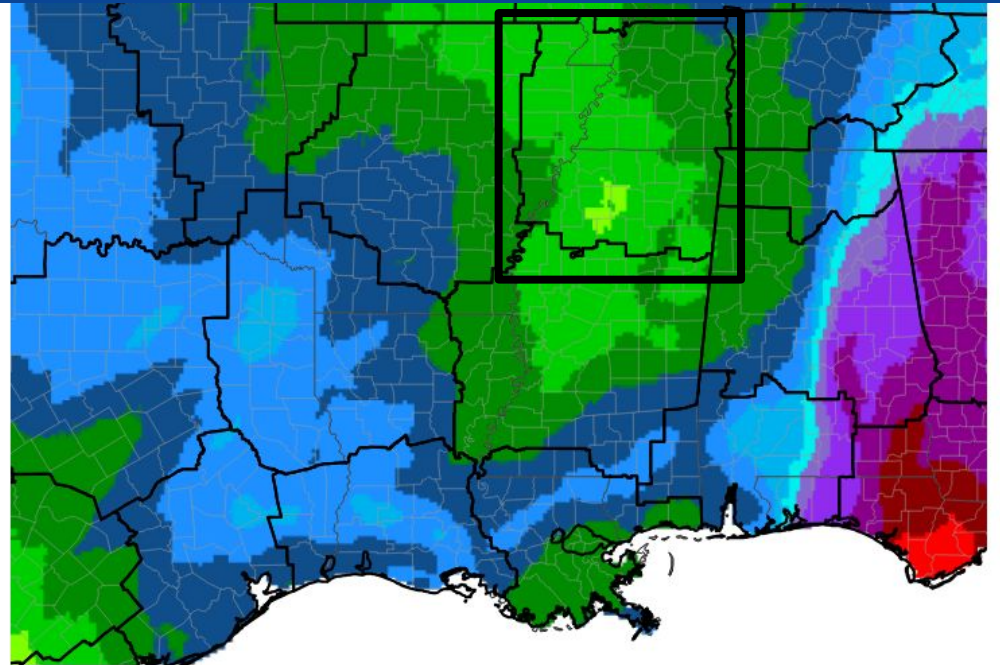
U.S. Department of Commerce

National Weather Service
Memphis, TN



Seven Day Precipitation Forecast

- The best chances for widespread rain across the Mid-South is likely Saturday through Sunday (Dec 16-17).
- Forecast precipitation amounts (QPF) are expected to be 0.50" or less.



Predicted Inches of Precipitation

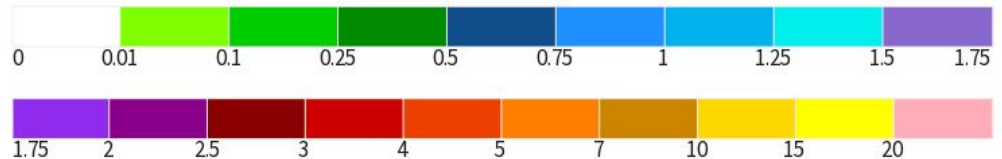


Image Caption: National Weather Service Weather Prediction Center courtesy of drought.gov ; 7-Day Quantitative Precipitation Forecast Valid December 14, 2023 through December 21, 2023





Long-Range Outlooks

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- The entire Mid-South has a 33% chance for above normal temperatures for December.
- There is a 33-40% chance that December precipitation across north MS will be above normal. The rest of the Mid-South has equal chances to be above or below normal for precipitation.
- In summary, December is trending warmer than normal, but could be above or below normal precipitation.

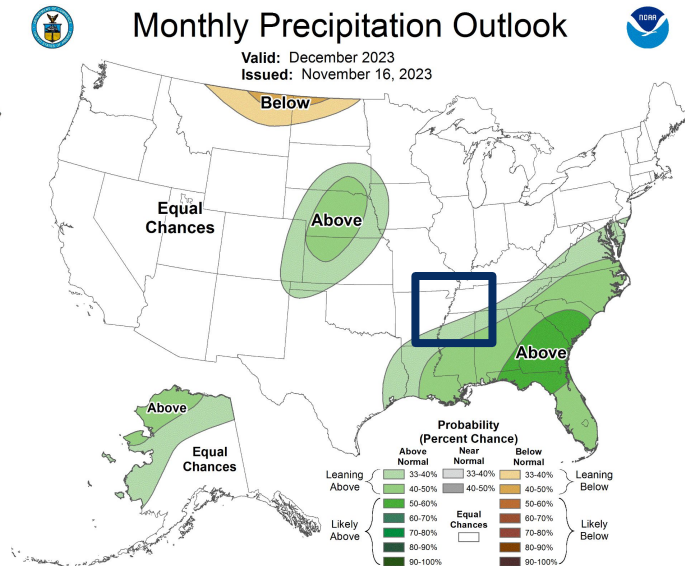
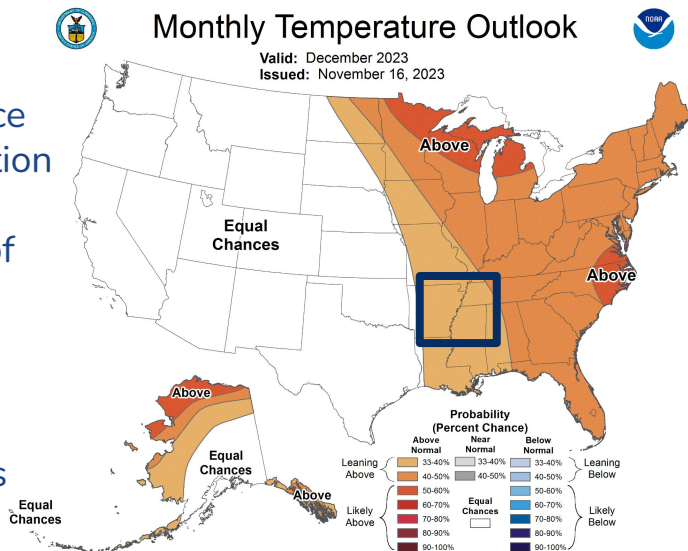


Image Captions:

Left - [Climate Prediction Center Monthly Temperature Outlook](#).

Right - [Climate Prediction Center Monthly Precipitation Outlook](#).

Valid December 2023



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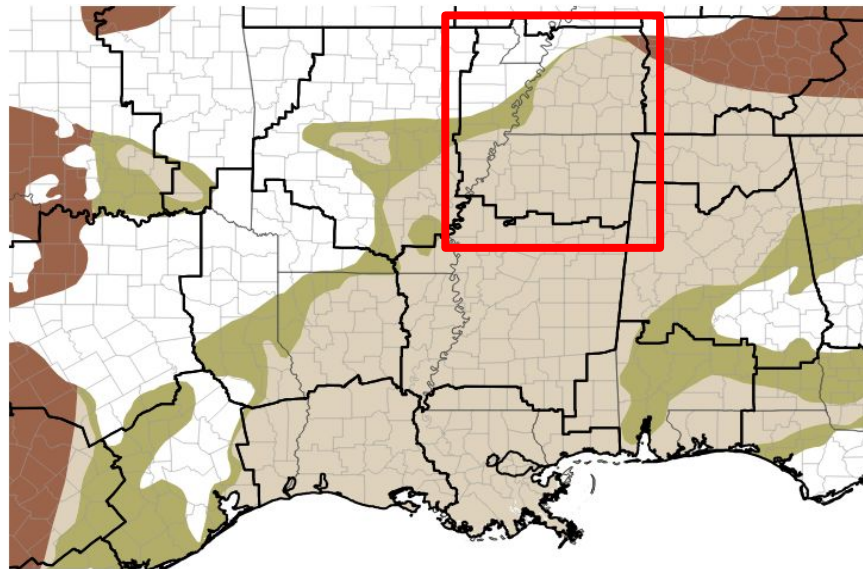
National Weather Service
Memphis, TN



Drought Outlook

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

- Drought conditions are expected to improve across a large portion of the Mid-South.
- A small swath along Interstate-40 in northeast Arkansas and West Tennessee will likely end their drought conditions.



Drought Is Predicted To...



Image Caption:

Climate Prediction Center Monthly Drought Outlook Released
11/30/2023 valid for 12/2023

Links to the latest:

[Climate Prediction Center Monthly Drought Outlook](#)
[Climate Prediction Center Seasonal Drought Outlook](#)



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